



#168 6/15/99  
T. Gray

PATENT  
ATTORNEY DOCKET NUMBER: 04585/00200R

Certificate of Mailing: Date of Deposit: June 3, 1999

I hereby certify under 37 C.F.R. § 1.8(a) that this correspondence is being deposited with the United States Postal Service as **first class mail** with sufficient postage on the date indicated above and is addressed to: Assistant Commissioner of Patents, Washington, D.C. 20231.

Colleen Coyne  
Printed name of person mailing correspondence

Colleen Coyne  
Signature of person mailing correspondence

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Andrew Goodearl et al. Art Unit: 1645  
Serial No.: 08/734,592 Examiner: S. Gucker  
Filed: October 22, 1996  
Title: GLIAL MITOGENIC FACTORS, THEIR PREPARATION AND USE

Assistant Commissioner For Patents  
Washington, D.C. 20231

STATEMENT UNDER 37 CFR §1.825

In reply to the Notice to Comply mailed March 3, 1999 and as required by 37 C.F.R. § 1.825(a), enclosed is an amended sequence listing consisting of 74 sheets to be inserted at the end of the application.

The amendments we made to correct typographical errors as required by the Examiner in the communication mailed March 3, 1999. I hereby submit that the substitute sheets contain no new matter.

As required by 37 C.F.R. § 1.825(b), enclosed is a diskette containing a copy of the sequence listing in computer readable form including all previously submitted data with the amendments incorporated therein. The contents of the computer readable form are the same as the contents of the paper sheets.

If there are any charges, or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

Date:

*June 3, 1999*

*Kristina Bieker-Brady*  
Kristina Bieker-Brady, Ph.D.  
Reg. No. 39,109

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**NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING  
NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES**

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- ☒ 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to these regulations, published at 1114 OG 29, May 15, 1990 and at 55 FR 18230, May 1, 1990.
- ☐ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- ☐ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- ☒ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
- ☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- ☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
- ☐ 7. Other:
- ☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- ☒ An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.
- ☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

For Rules Interpretation, call (703) 308-4216

For CRF Submission Help, call (703) 308-4212

For PatentIn software help, call (703) 308-6856

**PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR RESPONSE**

S. Gucker



1645

PAGE: 1

RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/734,592

DATE: 01/25/1999  
TIME: 17:10:33

Input Set: H734592.RAW

This Raw Listing contains the General  
Information Section and those Sequences  
containing ERRORS.

*new format*  
Does Not Comply  
Corrected Diskette Needed

1 <110> GOODEARL, ANDREW  
2 STROOBANT, PAUL  
3 MINGHETTI, LUISA  
4 WATERFIELD, MICHAEL  
5 MARCHIONNI, MARK  
6 CHEN, MARIO S.  
7 HILES, IAN  
8 <120> GLIAL MITOGENIC FACTORS, THEIR  
9 PREPARATION AND USE  
10 <130> 04585/00200R  
11 <140> US/08/734,592  
12 <141> 1996-10-22  
13 <150> 08/472,008  
14 <151> 1995-06-06  
15 <150> 08/036,555  
16 <151> 1993-03-24  
17 <150> 07/965,173  
18 <151> 1992-10-23  
19 <150> 07/940,389  
20 <151> 1992-09-03  
21 <150> 07/907,138  
22 <151> 1992-06-30  
23 <150> 07/863,703  
24 <151> 1992-04-03  
25 <160> 192  
26 <170> FastSEQ for Windows Version 3.0

## ERRORED SEQUENCES FOLLOW

E--> 27 <210> 136  
28 <211> 559 *561 shown (next page)*  
29 <212> DNA  
30 <213> Bos taurus  
31 <220>  
32 <221> CDS  
33 <222> (460)...(561)  
34 <223> N in position 214 is unknown.  
35 <220>  
36 <221> variation  
37 <222> (560)...(560)  
38 <223> N in position 560 varies.  
39 <220>

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RAW SEQUENCE LISTING  
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40 <221> variation  
 41 <222> (561)...(561)  
 42 <223> N in position 561 varies.  
 43 <220>  
 44 <221> variation  
 45 <222> (34)...(34)  
 46 <223> Xaa in position 34 is Ala.  
 47 <400> 136  
 48 agtttcccc ccctaacttgt cggaactctg ggctcgcgcg cagggcagga gcgagcggc 60  
 49 ggcggctgcc caggcgatgc gagcgcgggc cggacggtaa tcgcctctcc ctctcgggc 120  
 50 tgcgagcgcg ccggaccgag gcagcgacag gagcggaccg cggcgggaac cgaggactcc 180  
 W--> 51 ccagcggcgc gccagcagga gccacccgcg gaggcgtgcg accgggacgg agcgcccgcc 240  
 52 agtcccaggt ggcccggacc gcacgttgcg tccccgcgct cccgcgcggc gacaggagac 300  
 53 gctccccccc acgcgcgcgc cgctcggcc cggtcgctgg cccgcctcca ctccggggac 360  
 54 aaacttttcc cgaagccgat ccagccctc ggacccaaac ttgtcgcgcg tcgccttcgc 420  
 55 cgggagccgt ccgcgcagag cgtgcacttc tcgggcgag atg tcg gag cgc aga 474  
 56 Met Ser Glu Arg Arg  
 57 1 5  
 58 gaa ggc aaa ggc aag ggg aag ggc ggc aag aag gac cga ggc tcc ggg 522  
 59 Glu Gly Lys Gly Lys Gly Lys Gly Gly Lys Lys Asp Arg Gly Ser Gly  
 60 10 15 20  
 W--> 61 aag aag ccc gtg ccc gcg gct ggc ggc ccg agc cca gnn 561  
 62 Lys Lys Pro Val Pro Ala Ala Gly Gly Pro Ser Pro Xaa  
 63 25 30

64 <210> 138  
 E--> 65 <211> 178 179 show  
 66 <212> DNA  
 67 <213> Bos taurus  
 68 <220>  
 69 <221> CDS  
 70 <222> (3)...(179)  
 71 <221> variation  
 72 <222> (179)...(179)  
 73 <223> N in position 179 varies.  
 74 <220>  
 75 <221> variation  
 76 <222> (59)...(59)  
 77 <223> Xaa in position 59 is Gly.  
 78 <400> 138  
 79 cc ttg cct ccc cgc ttg aaa gag atg aag agt cag gag tct gtg gca 47  
 80 Leu Pro Pro Arg Leu Lys Glu Met Lys Ser Gln Glu Ser Val Ala  
 81 1 5 10 15  
 82 ggt tcc aaa cta gtg ctt cgg tgc gag acc agt tct gaa tac tcc tct 95  
 83 Gly Ser Lys Leu Val Leu Arg Cys Glu Thr Ser Ser Glu Tyr Ser Ser  
 84 20 25 30  
 85 ctc aag ttc aag tgg ttc aag aat ggg agt gaa tta agc cga aag aac 143  
 86 Leu Lys Phe Lys Trp Phe Lys Asn Gly Ser Glu Leu Ser Arg Lys Asn  
 87 35 40 45  
 W--> 88 aaa cca caa aac atc aag ata cag aaa agg ccg ggn 179

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RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/734,592

DATE: 01/25/1999  
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Input Set: H734592.RAW

	89	Lys Pro Gln Asn Ile Lys Ile Gln Lys Arg Pro Xaa	
	90	50	55
E-->	91	<210> 139	
	92	<211> <u>122</u> 124 shows	
	93	<212> DNA	
	94	<213> Bos taurus	
	95	<220>	
	96	<221> CDS	
	97	<222> (2)...(124)	
	98	<221> variation	
	99	<222> (123)...(124)	
	100	<223> N in positions 123 and 124 varies.	
	101	<220>	
	102	<221> variation	
	103	<222> (41)...(41)	
	104	<223> Xaa in position 41 is Ala.	
	105	<400> 139	
	106	g aag tca gaa ctt cgc att agc aaa gcg tca ctg gct gat tct gga gaa	49
	107	Lys Ser Glu Leu Arg Ile Ser Lys Ala Ser Leu Ala Asp Ser Gly Glu	
	108	1 5 10 15	
	109	tat atg tgc aaa gtg atc agc aaa cta gga aat gac agt gcc tct gcc	97
	110	Tyr Met Cys Lys Val Ile Ser Lys Leu Gly Asn Asp Ser Ala Ser Ala	
	111	20 25 30	
W-->	112	aac atc acc att gtg gag tca aac grn	124 L
	113	Asn Ile Thr Ile Val Glu Ser Asn Xaa	
	114	35 40	
E-->	115	<210> 161	
	116	<211> <u>141</u> 142 shows	
	117	<212> DNA	
	118	<213> Bos taurus	
	119	<220>	
	120	<221> CDS	
	121	<222> (2)...(142)	
	122	<221> variation	
	123	<222> (142)...(142)	
	124	<223> N in position 142 varies.	
	125	<220>	
	126	<221> variation	
	127	<222> (47)...(47)	
	128	<223> Xaa in position 47 is Arg.	
	129	<400> 161	
	130	a cat aac ctt ata gct gag cta agg aga aac aag gcc cac aga tcc aaa	49
	131	His Asn Leu Ile Ala Glu Leu Arg Arg Asn Lys Ala His Arg Ser Lys	
	132	1 5 10 15	
	133	tgc atg cag atc cag ctt tcc gca act cat ctt aga gct tct tcc att	97
	134	Cys Met Gln Ile Gln Leu Ser Ala Thr His Leu Arg Ala Ser Ser Ile	
	135	20 25 30	
W-->	136	ccc cat tgg gct tca ttc tct aag acc cct tgg cct tta gga agn	142 L

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/734,592DATE: 01/25/1999  
TIME: 17:10:33

Input Set: H734592.RAW

137	Pro His Trp Ala Ser Phe Ser Lys Thr Pro Trp Pro Leu Gly Xaa
138	35 40 45

Input Set: H734592.RAW

Line	Error/Warning	Original Text
28	E Input 559, Calc# Bases 561 differ	<211> 559
51	W "N" or "Xaa" used: Feature required	ccagcggcgc gccagcagga gccacccgc gagncgtg
61	W "N" or "Xaa" used: Feature required	aag aag ccc gtg ccc gcg gct ggc ggc ccg a
65	E Input 178, Calc# Bases 179 differ	<211> 178
88	W "N" or "Xaa" used: Feature required	aaa cca caa aac atc aag ata cag aaa agg c
92	E Input 122, Calc# Bases 124 differ	<211> 122
112	W "N" or "Xaa" used: Feature required	aac atc acc att gtg gag tca aac gnn
116	E Input 141, Calc# Bases 142 differ	<211> 141
136	W "N" or "Xaa" used: Feature required	ccc cat tgg gct tca ttc tct aag acc cct t